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**PATENT**  
Attorney Docket No. 04546

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Kanekar et al.

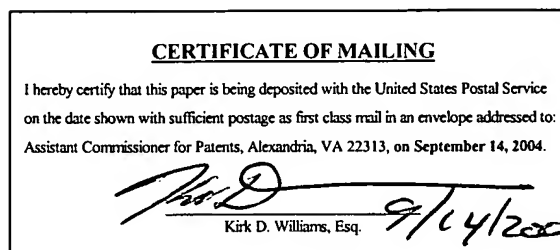
Group Art Unit: 2188

Application No. 10/630,174

Examiner: Reginald G. Bragdon

Filed: July 29, 2003

For: Generating and Merging Lookup Results  
to Apply Multiple Features



Commissioner for Patents  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT - A**

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, the references listed on the enclosed Form PTO-1449 are submitted for consideration by the Examiner in the examination of the above-identified patent application. The full consideration of the references in their entirety by the Examiner is respectfully requested and encouraged. Also, it is respectfully requested that the references be entered into the record of the present application and that the Examiner place his or her initials in the appropriate area on the enclosed Form PTO-1449, thereby indicating the Examiner's consideration of each of the references.

A bona fide attempt is made to comply with §§ 1.97-98. The filing of this information disclosure statement should not be construed as a representation that a search has been made, nor is it to be construed to be an admission that the information cited in the statement is, or is considered to be, material to patentability as defined in § 1.56(b). Additionally, the submission of this IDS is for the purpose of providing a complete record and is not a concession that the references are prior art to the invention claimed in the patent application. The right is expressly reserved to establish an invention date earlier than the above-identified filing date in order to remove any reference submitted herewith as prior art should it be deemed appropriate to do so. Furthermore, the submission of the references is not to be taken as a concession that any reference represents art that is relevant or analogous to the claimed invention. Accordingly, the right to argue that any reference is not properly within the scope of prior art relevant to an examination of the claims in the above-identified application is also expressly reserved.

**The Information Disclosure Statement is being filed:**

- ☒ Under § 1.97(b): (1) within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d); (2) within three months of the date of entry of the national stage as set forth in § 1.491 in an international application; (3) before the mailing of a first Office action on the merits; or (4) before the mailing of a first Office action after the filing of a request for continued examination under § 1.114.
- ☐ Under § 1.97(c): after (1), (2), or (3) above (i.e., after paragraph (b)) and before the mailing date of any of a final action under § 1.113, a notice of allowance under § 1.311, or an action that otherwise closes prosecution in the application, and is accompanied by:
- ☐ the statement specified in 37 C.F.R. § 1.97(e):
- ☐ Each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement; or
- ☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in § 1.56(c) more than three months prior to the filing of the information disclosure statement.
- ☐ the fee set forth in 37 C.F.R. § 1.17(p) (see "Fees" below).
- ☐ Under § 1.97(d): after the period specified in § 1.97(c) and before payment of the issue fee, and is accompanied by:
- ☐ the statement specified in 37 C.F.R. § 1.97(e):
- ☐ Each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement; or
- ☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in § 1.56(c) more than three months prior to the filing of the information disclosure statement.
- ☐ the fee set forth in 37 C.F.R. § 1.17(p) (see "Fees" below).

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### Copies Of The References

- ☒ Enclosed herewith are copies of the references listed on the enclosed Form PTO-1449. A concise explanation of the relevance, as it is presently understood by the individual designated in § 1.56(c) most knowledgeable about the content of the information, of each patent, publication, or other information listed that is not in the English language is included either separate from applicant's specification or incorporated therein. Furthermore, a copy of the translation of a non-English language reference is included herewith if a written English-language translation of a non-English-language document, or portion thereof, is within the possession, custody, or control of, or is readily available to any individual designated in § 1.56(c).
- ☒ A copy of a foreign search report is enclosed herewith.
- ☐ Per 37 C.F.R. § 1.98(d), copies of the references listed on the enclosed Form PTO-1449 are not provided as they were previously submitted to, or cited by, the Office in an earlier application, and (1) the earlier application is properly identified in the information disclosure statement and is relied on for an earlier effective filing date under 35 U.S.C. 120; and (2) the information disclosure statement submitted in the earlier application complies with paragraphs (a) through (c) of this 37 C.F.R. § 198. The details of the parent application(s) relied upon for an earlier filing date under 35 U.S.C. § 120 in which copies of the references were previously furnished are set out below:

U.S. APPLICATIONS		Status ( <i>check one</i> )		
U.S. APPLICATIONS	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
1.				
2.				
3.				

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**Fees**


- ☒ **No fee** is owed by the applicant(s).  
☐ **The IDS Fee of \$180.00** is due. (Fee code 126.)  
☐ Attached is check No. \_\_\_\_\_ in the amount of \$180.  
☐ Charge Deposit Account No. 501430 in the amount of \$180.

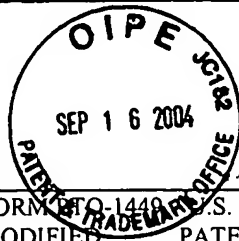
**Authorization To Charge Additional Fees and Credit any Overpayment**

- ☒ If any additional fees are owed in connection with this communication, please charge Deposit Account No. 501430.  
☒ Credit Account No. 501430 for any overpayment in connection with this communication.

Date: September 14, 2004      Respectfully submitted,

The Law Office of Kirk D. Williams

By  9/14/2004  
Kirk D. Williams, Esq., Reg. 42,229  
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303-778-0748 (facsimile)



FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE MODIFIED PATENT AND TRADEMARK OFFICE				Application Number	10/630,174
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				Filing Date	July 29, 2003
				First Named Inventor	Kanekar Bhushan
				Group Art Unit	2188
				Examiner Name	Reginald Bragdon
Sheet	1	of	2	Attorney Docket No.	04546

OTHER DOCUMENTS		
EXAMINER'S INITIALS	Cite No.	Include name of the author (in capital letters), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	AA	TONG-BI PEI and CHARLES ZUKOWSKI, "VLSI Implementation of Routing Tables: Tries and CAMs," Networking in the Nineties, Proceedings of the Annual Joint Conference of the Computer and Communications Societies, New York, April 7, 1991, pages 515-524, Vol. 2, Conf. 10.
	AB	ANTHONY MCAULEY and PAUL FRANCIS, "Fast Routing Table Lookup Using CAMs," Networking: Foundation for the Future, Proceedings of the Annual Joint Conference of the Computer and Communications Societies, Los Alamitos, March 28, 1993, pages 1382-1391, Vol. 2, Conf 12.
	AC	JON P. WADE and CHARLES G. SODINI, "A Ternary Content Addressable Search Engine," IEEE Journal of Solid-State Circuits, Vol. 24, No. 4, August 1989, pp. 1003-1013.
	AD	TEUVO KOHONEN, CONTENT-ADDRESSABLE MEMORIES, 1987, pp. 128-129 and 142-144, Springer-Verlag, New York.
	AE	BRIAN DIPERT, ed., "Special-purpose SRAMs Smooth the Ride," EDN, June 24, 1999, pp. 93-104.
	AF	"What is a CAM (Content-Addressable Memory)?," Application Brief AB-N6, Rev. 2a, Music Semiconductors, Milpitas, CA, September 30, 1998, 4 pages.
	AG	"Reading Out the Valid LANCAM Memory Entries," Application Brief AB-N4, Rev. 1a, Music Semiconductors, Milpitas, CA, September 30, 1998, 4 pages.
	AH	"Extending the LANCAM Comparand," Application Brief AB-N3, Rev. 1.0a Draft, Music Semiconductors, Milpitas, CA, September 30, 1998, 4 pages.
	AI	"Advantages of CAM in ASIC-Based Network Address Processing," Application Brief AB-N11, Rev. 1.2a Draft, Music Semiconductors, Milpitas, CA, September 30, 1998, 4 pages.
	AJ	"Virtual Memory Applications of the MU9C1480A LANCAM," Application Note AN-N3, Rev. 1a, Music Semiconductors, Milpitas, CA, September 30, 1998, 12 pages.
	AK	"Using the MU9C1965A LANCAM MP for Data Wider than 128 Bits," Application Note AN-N19, Rev. 1a, Music Semiconductors, Milpitas, CA, September 30, 1998, 16 pages.

Examiner Signature		Date Considered	
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<b>FORM PT/TA-101 U.S. DEPARTMENT OF COMMERCE MODIFIED PATENT AND TRADEMARK OFFICE</b>				Application Number	10/630,174
				Filing Date	July 29, 2003
				First Named Inventor	Kanekar Bhushan
				Group Art Unit	2188
				Examiner Name	Reginald Bragdon
Sheet	2	of	2	Attorney Docket No.	04546

OTHER DOCUMENTS		
EXAMINER'S INITIALS	Cite No.	Include name of the author (in capital letters), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	AL	"Fast IPv4 and IPv4 CIDR Address Translation and Filtering Using the MUAC Routing CoProcessor (RCP)," Application Note AN-N25, Rev. 0a, Music Semiconductors, Milpitas, CA, October 1, 1998, 16 pages.
	AM	"Using MUSIC Devices and RCPs for IP Flow Recognition," Application Note AN-N27, Rev. 0, Music Semiconductors, Milpitas, CA, October 21, 1998, 20 pages.
	AN	"Wide Ternary Searches Using Music CAMs and RCPs," Application Note AN-N31, Rev. 0, Music Semiconductors, Milpitas, CA, April 13, 1999, 8 pages.

Examiner Signature		Date Considered	
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